GRIFFIN INTERNATIONAL INC

March 23, 1994

Mr. Richard Spiese
State of Vermont
Department of Environmental Conservation
HMMD
103 South Main St.
Waterbury, VT 05671-0404

Dear Mr. Spiese,

Enclosed is the completed Site Assessment Report regarding the two fuel oil USTs at Mount Anthony Union Middle School in Bennington, Vermont. The report contains an introduction and a description of the site history, as well as the required investigation procedures, conclusions and recommendations.

If you have any questions regarding this report, please call anytime.

Sincerely,

Peter Hack
Engineer

c: Dick Lavariere, Mt. Anthony Union Schools

2B Dorset Lane • Williston, VT 05495 • 802-879-7708

REPORT ON THE INVESTIGATION OF

SUBSURFACE PETROLEUM CONTAMINATION

AT

Mount Anthony Union Middle School
Bennington, VT

PREPARED FOR:

Vermont Department of Environmental Conservation
Hazardous Materials Management Division
103 South Main St.
Waterbury, VT 05671-0404

VTDEC Contract #0963355

PREPARED BY:

Griffin International
2B Dorset Lane
Williston, VT 05495
(802) 879-7708

TABLE OF CONTENTS

I. INTRODUCTION

In November 1993, a leak was detected in the underground piping for a 10,000 gallon fuel oil underground storage tank (UST #1) located at Mount Anthony Middle School in Bennington, VT. The leak was immediately repaired and an environmental consultant (ConTest) conducted limited testing and investigations, and submitted a report of their findings. The amount and duration of the release is unknown. On December 22, 1993 Griffin inspected the removal of a separate 10,000 gallon fuel oil tank (UST #2) located within 75 feet of the first tank at the same site. No subsurface petroleum contamination was detected during this tank pull. Due to the detection of petroleum contamination in November, the state requested an investigation of the degree and extent of the contamination at this site.

The Vermont Department of Environmental Conservation (VTDEC) retained the services of Griffin International to perform a site assessment and prepare a report of findings. This report addresses the state's site assessment request, and provides conclusions and recommendations for site closure.

II. SITE DESCRIPTION

Mount Anthony Middle School is located on Main Street in Bennington, approximately 1/2 mile east of the Route 7 intersection (see site maps, Appendix A). The site is flat and consists of a small gravel parking area on the Main Street side, and paved parking and driveways on the remainder of open portion of the site. The school building covers approximately 80% of the property. Along this section of Main Street and surrounding the school are a dense mix of commercial and residential buildings. There are three gas stations within 500 feet of the site. The Walloomsac River flows east to west about 200 feet north of the school building.

Geologic maps indicate a glaciofluvial gravel outwash overburden with underlying Monkton quartzite bedrock.

The City of Bennington is served by municipal water and sewer, which is located in the Main Street right of way.

III. INVESTIGATIVE PROCEDURES

A. Monitoring Well Installation

On February 22, 1994 three monitoring wells were installed by Cushing and Sons, Inc. Drilling and Boring Contractors, under the direct supervision of a Griffin Engineer. The wells were installed using an air rotary drill rig to penetrate the cobbles in the subsurface. Undisturbed soil samples were not collected due to the use of the air-rotary method. Soils ejected from the borehole were screened for volatile organic compounds (VOCs) using an HNU Photo-ionization

Device (PID) and the results are documented on the boring logs in Appendix B. Soil types encountered during the drilling operation were gravel and boulders. One monitoring well (MW4) had been previously installed next to UST #1.

The locations of the three new wells are shown on the Site Maps in Appendix A. The wells are constructed of two inch diameter 0.01" slot PVC well screen and casing. The annulus between the borehole wall and the screened section contains a silica sand pack to filter fine sediments from the groundwater entering the well. The annulus is also sealed at the top with bentonite to prevent surface water from infiltrating the well. The wells have flush mounted aluminum covers. The well logs show construction details, PID readings, soil types and water table elevations for each well. Monitoring well #4 is constructed with 4" PVC, and was previously installed with a backhoe.

Monitoring well #1 is located at the south-west corner of the building near the main entrance to the school. This is in the presumed crossgradient direction from the former UST. The soils in this hole consisted of dry coarse gravel and stones. No elevated concentrations of VOCs were detected above background readings of 0.2 parts per million (ppm) in this boring. The water table was detected at 10 feet below grade and bedrock was not encountered.

Monitoring well #2 is located at the south-west corner of the site, in a presumed upgradient direction from the former UST. The soils in this borehole mainly consisted of gravel and boulders. PID screenings of soils from this borehole did not indicate the presence of VOC concentrations above background readings of 0.2 ppm. Groundwater was encountered at 9 feet below grade.

Monitoring well #3 was placed on the northwest corner of the building in order to define the downgradient extent of contamination. Gravel and boulders were encountered in this borehole. PID readings of the borehole indicated VOC concentrations of 15 ppm. The watertable was at 8 feet below the ground surface.

B. Groundwater Sampling and Analysis

On March 1, 1994 ground water samples were collected from all four wells. All samples were collected per Griffin sampling protocols and analyzed according to EPA Method 602 and 8100(modified), which tests for benzene, toluene, ethylbenzene, and xylene (all BTEX compounds), methyl tertiary butyl ether (MTBE), and Total Petroleum Hydrocarbons (TPH).

The laboratory analysis of these groundwater samples did not indicate the presence of any BTEX, MTBE, or TPH compounds in MW1, MW2, and MW4. The sample collected from monitoring well MW3 did contain very low concentrations of Ethylbenzene, Toluene, and Xylene, well below the current Vermont Drinking Water Standards. The analytical laboratory results are included in Appendix C.

The analysis of the equipment blank, trip blank and duplicate samples indicate that proper QA/QC was maintained during collection, transportation and analysis of the water samples.

C. Groundwater Flow and Gradient

Before sampling on March 1, 1994 the depth to groundwater was measured in each well. The measurements are based on an assumed benchmark of 100 feet taken at the top of MW2. The water level data is shown on the Groundwater Contour Map in Appendix A. Groundwater appears to be flowing to the south-east at a calculated gradient of 2%.

D. PID Screening

Indoor air was screened on February 22, 1994 with a PID to determine the presence of VOCs in rooms previously impacted by vapors. No concentrations of VOCs were detected above a background level of 0.2 ppm in the cafeteria, kitchen, hallways and boiler room. Ambient air was screened as well as all floor drains, cracks, corners etc. in these areas.

Stockpiled soils from the vicinity of the leak (<5 cy) are polyencapsulated on site. The soils were not frozen, and therefore samples from the pile were screened with a PID on this same date. Maximum VOC concentrations of 6 ppm were detected in this stockpile.

IV. RECEPTOR SURVEY

Griffin conducted a visual survey of the area to locate and identify any potential receptors of subsurface contamination. Potential receptors include the school building and other buildings nearby. No supply wells are located in this vicinity. The Walloomsac River appears to be cross-gradient from this site. The municipal water supply and sewer system are not considered potential receptors.

V. RISK ASSESSMENT

The nearest structures to the school and the school building itself do not appear to be at risk of contamination. The levels of contamination found at this site would not pose a significant risk to the environment or the public if they were to migrate off site. The water supply system and nearby buildings and businesses are not considered to be at risk of contamination from this site.

VI. CONCLUSIONS

Based on the investigations and analytical laboratory results, Griffin has reached the following conclusions:

1) Underground piping for a fuel oil UST (UST #1) was found to be leaking and was repaired in November, 1993. An investigation by another consultant (ConTest) indicated the presence of petroleum vapors in the school building at that time. The repair of that leak has removed the probable source of contamination. Although the amount and duration of the release is unknown, the data suggests that minimal fuel oil was released from the leaking underground piping.

2) A second fuel oil UST (UST #2) was removed in December, 1993 and no contamination was detected during the removal process.

3) Three soil borings did not contain elevated levels of VOCs when screened with a PID, except for MW3, which contained 15 ppm. Groundwater samples collected from three monitoring wells did not contain detectable levels of petroleum contamination. Groundwater from MW3 did contain low levels of BTEX compounds.

4) Groundwater contamination in MW3 is likely due to an unknown source, as this well is hydraulically upgradient of the subject USTs and underground piping. The location and extent of this possible source is unknown.

5) A five cubic-yard stockpile of contaminated soils, stockpiled during the 1993 repair of UST #1 piping, remains polyencapsulated on site.

6) Residual soil contamination in the borehole for MW3 does not pose a risk to the environment or to public health and safety.

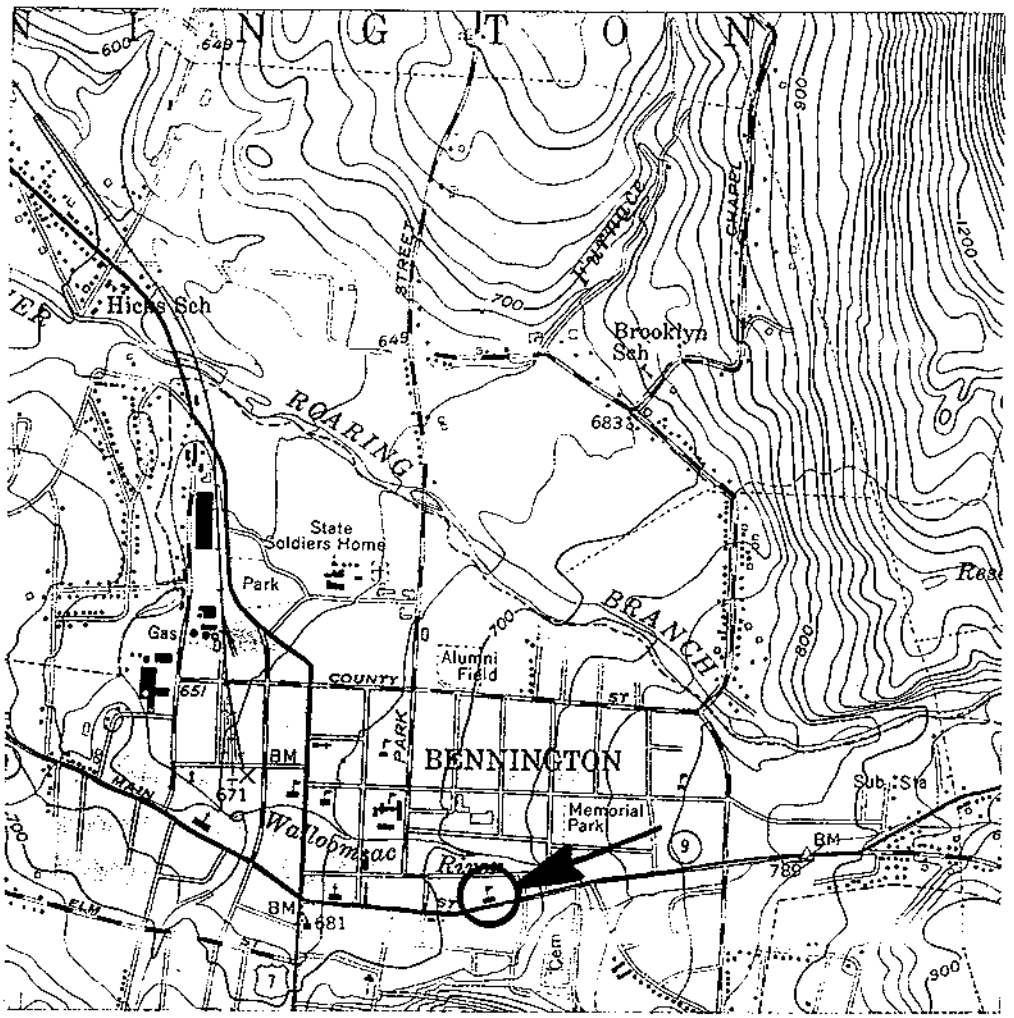
VII. RECOMMENDATIONS

The stockpiled soils still contain some elevated VOC concentrations. Any residual contamination that remains does not pose a threat to the environment or the public and will be reduced to non-detectable levels by the natural processes of volatilization and biodegradation. However, these soils should be screened in the fall of 1994, and when VOC levels are sufficiently low (< 5 ppm) Griffin will recommend returning the soil to grade.

Due to the very low concentrations of subsurface petroleum contamination found during this investigation, Griffin recommends no further investigation, monitoring, or remediation efforts for groundwater or soil contamination.

APPENDIX A

Site Maps
Groundwater Contour Map



JOB #: 12934471
SOURCE: USGS BENNINGTON QUADRANGLE

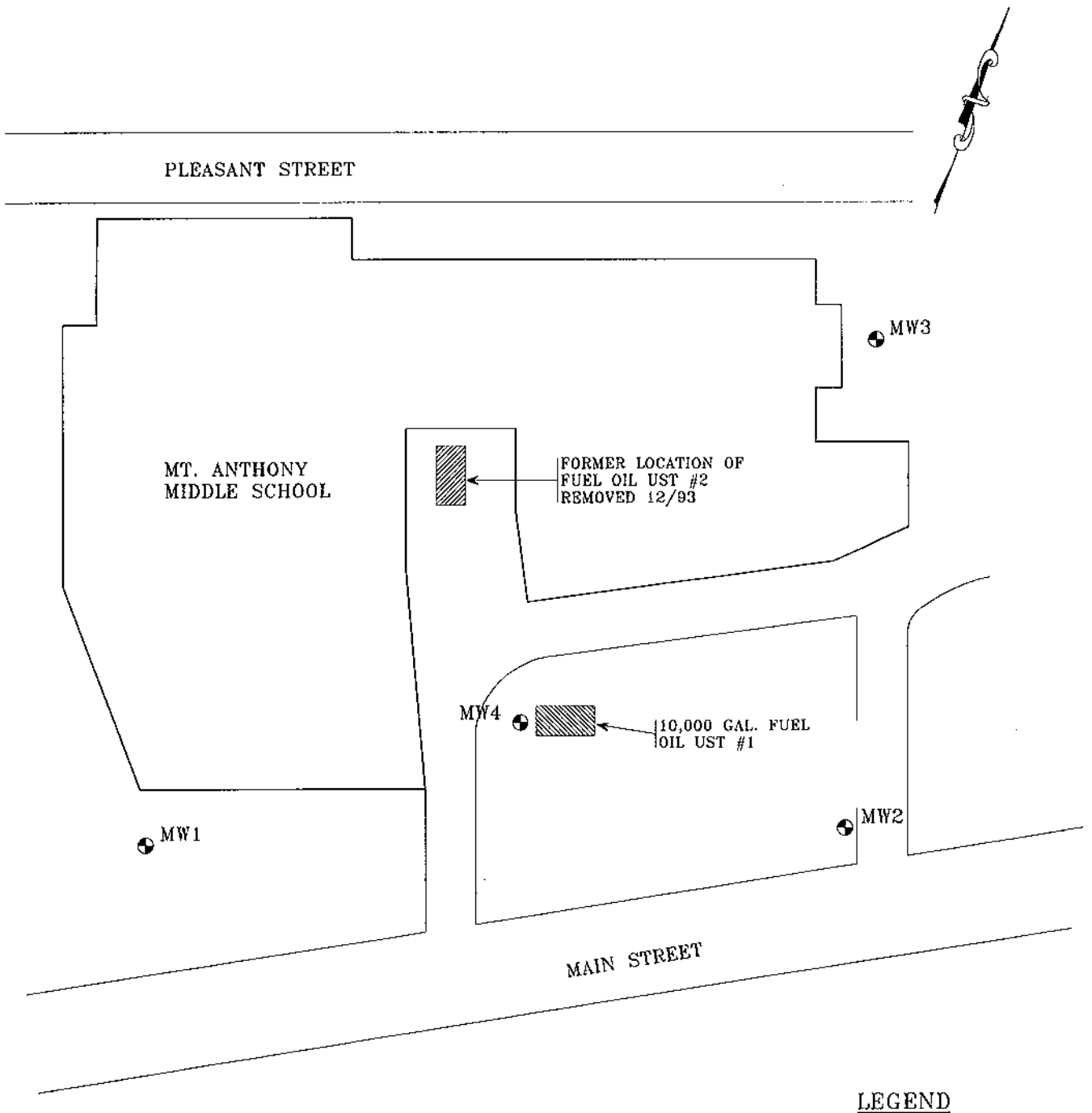
GRIFFIN INTERNATIONAL INC

MT. ANTHONY SCHOOL

BENNINGTON, VERMONT

SITE LOCATION MAP

DATE: 3/7/94	DWG.#:1	SCALE: 1:24000	DRN.: SB	APP.:PH



JOB #: 12934471

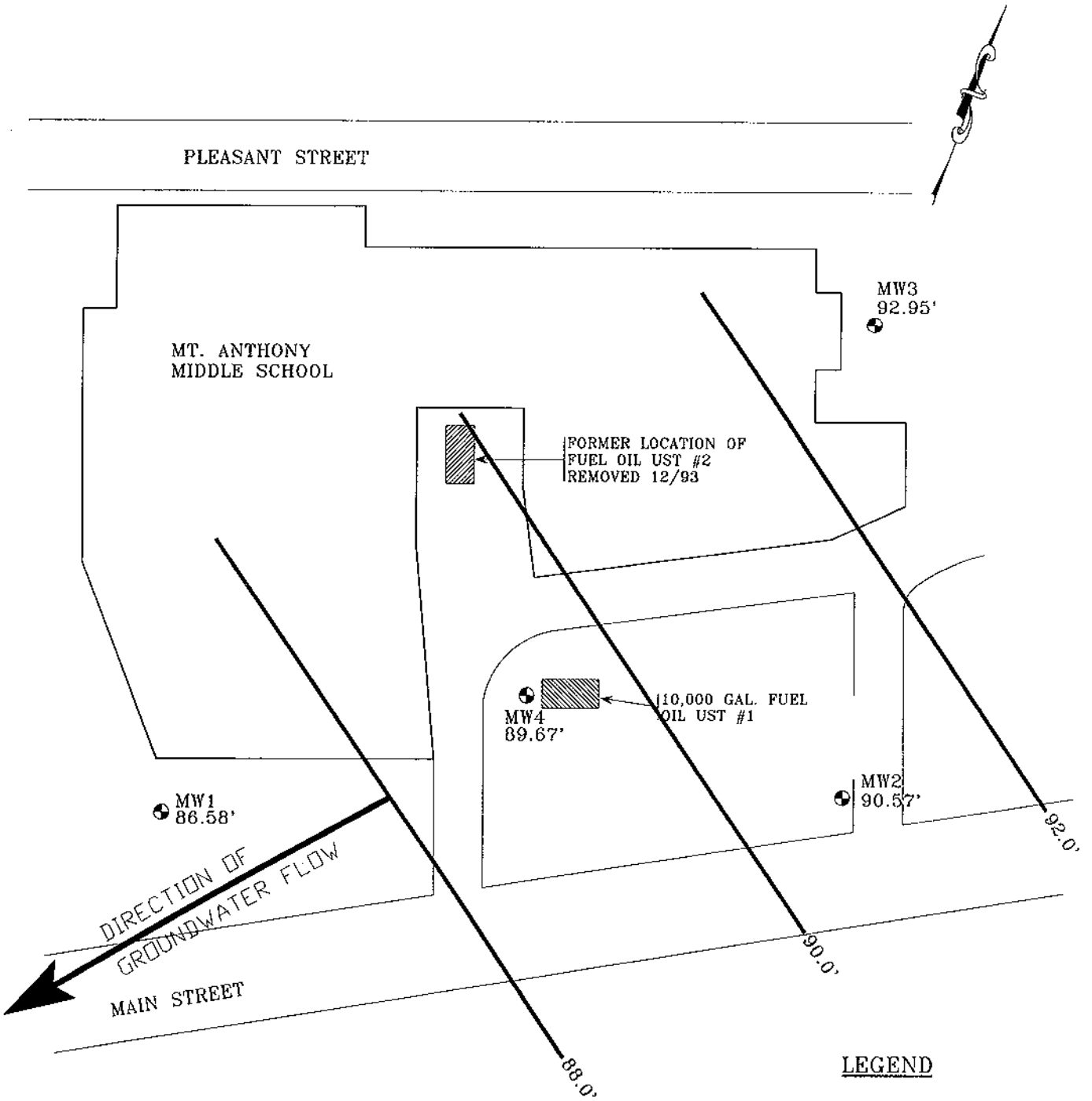
GRIFFIN INTERNATIONAL INC

MT. ANTHONY MIDDLE SCHOOL

BENNINGTON, VERMONT

SITE MAP

DATE: 3/7/94	DWG.#: 2	SCALE: 1"=60'	DRN.: SB	APP.: PH



JOB #: 12934471
SAMPLE DATE: 3/1/94

GRIFFIN INTERNATIONAL INC

MT. ANTHONY MIDDLE SCHOOL

BENNINGTON, VERMONT

GROUNDWATER CONTOUR MAP

DATE: 3/7/94	DWG.#: 3	SCALE: 1"=60'	DRN.: SB	APP.: PH

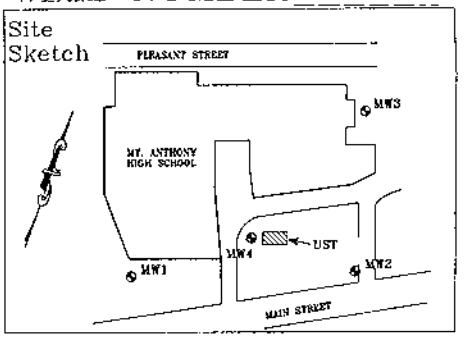
APPENDIX B

Boring Logs

WELL NUMBER MW1

PROJECT MT. ANTHONY HIGH SCHOOL
LOCATION BENNINGTON, VERMONT
DATE DRILLED 2/22/94 TOTAL DEPTH OF HOLE 18'
DIAMETER 8"
SCREEN DIA. 2" LENGTH 10' SLOT SIZE 0.010"
CASING DIA. 2" LENGTH 5.5' TYPE sch 40 pvc
DRILLING CO. CUSHING DRILLING METHOD AIR ROTARY
DRILLER BOB LOG BY P. HACK

Site Sketch



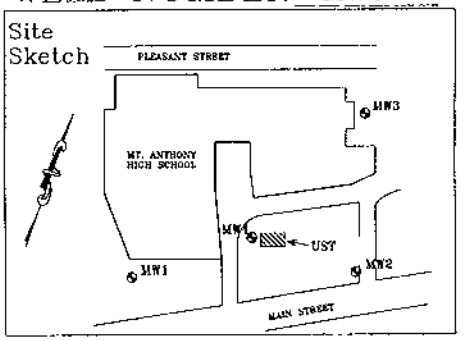
GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0		ROAD BOX LOCKING WELL CAP CONCRETE			0
1–3		NATIVE BACKFILL		Frost, quartz at 4'– hard, light brown pink GRAVEL, stones, dry	1–3
4–5		BENTONITE			4–5
6–8		WELL RISER		Coarse GRAVEL, stones, dry	6–8
9		SAND PACK			9
10				10.5' WATER TABLE ▼	10
11–17		WELL SCREEN			11–17
18		UNDISTURBED NATIVE SOIL	18' 0.2 ppm	BASE OF WELL AT 16' END OF EXPLORATION AT 18'	18
19–25					19–25

WELL NUMBER MW2

PROJECT MT. ANTHONY HIGH SCHOOL
LOCATION BENNINGTON, VERMONT
DATE DRILLED 2/22/94 TOTAL DEPTH OF HOLE 18'
DIAMETER 8"
SCREEN DIA. 2" LENGTH 10' SLOT SIZE 0.010"
CASING DIA. 2" LENGTH 5.5' TYPE sch 40 pvc
DRILLING CO. CUSHING DRILLING METHOD AIR ROTARY
DRILLER BOB LOG BY P. HACK

Site Sketch



GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0		ROAD BOX LOCKING WELL CAP CONCRETE			0
1–5		NATIVE BACKFILL	0'–6.0' 0.2 ppm	Light brown SAND/GRAVEL	1–5
5		BENTONITE			5
6		WELL RISER			6
7–8					7–8
9		SAND PACK		9.0' WATER TABLE	9
10–11					10–11
12		WELL SCREEN			12
13–15			9.0'–18.0' 0.2 ppm	SAND and GRAVEL, wet	13–15
15		BOTTOM CAP			15
16–17					16–17
18		UNDISTURBED NATIVE SOIL		BASE OF WELL AT 16' END OF EXPLORATION AT 18'	18
19–25					19–25

PROJECT MT. ANTHONY HIGH SCHOOL

LOCATION BENNINGTON, VERMONT

DATE DRILLED 2/22/94 TOTAL DEPTH OF HOLE 18'

DIAMETER 8"

SCREEN DIA. 2" LENGTH 10' SLOT SIZE 0.010"

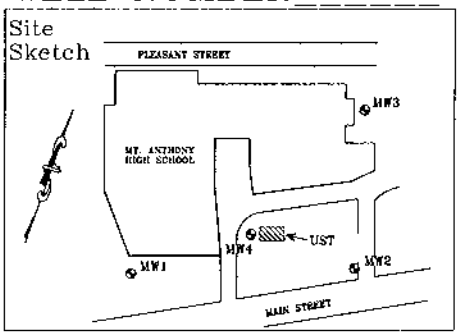
CASING DIA. 2" LENGTH 3.5' TYPE sch 40 pvc

DRILLING CO. CUSHING DRILLING METHOD AIR ROTARY

DRILLER BOB LOG BY P. HACK

WELL NUMBER MW3

Site Sketch



GRIFFIN INTERNATIONAL, INC

DEPTH IN FEET	WELL CONSTRUCTION	NOTES	BLOWS PER 6" OF SPOON & PID READINGS	DESCRIPTION/SOIL CLASSIFICATION (COLOR, TEXTURE, STRUCTURES)	DEPTH IN FEET
0		ROAD BOX			0
1		LOCKING WELL CAP			1
2		CONCRETE			2
3		NATIVE BACKFILL			3
4		BENTONITE	0'–6.0'	ROCK	4
5		WELL RISER			5
6					6
7		SAND PACK			7
8				8.0' WATER TABLE ▼	8
9					9
10		WELL SCREEN			10
11					11
12					12
13		BOTTOM CAP			13
14			14.0' 15.0 ppm	BOULDERS	14
15					15
16					16
17					17
18		UNDISTURBED NATIVE SOIL		BASE OF WELL AT 14' END OF EXPLORATION AT 18'	18
19					19
20					20
21					21
22					22
23					23
24					24
25					25

APPENDIX C

Laboratory Results

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International
PROJECT NAME: Mt. Anthony's H.S.
REPORT DATE: March 10, 1994
DATE SAMPLED: March 1, 1994

PROJECT CODE: GIMA1937
REF.#: 56,871 - 56,877

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Chain of custody indicated samples were preserved with HCl.

All samples were prepared and analyzed by requirements outlined in the referenced method and within the specified holding times. All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced method. Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Individual sample performance was monitored by the addition of surrogate analytes to each sample. All surrogate recovery data was determined to be within laboratory QA/QC guidelines unless otherwise noted.

Reviewed by,

Mark L. Fauser
for

Harry B. Locker, Ph.D.
Laboratory Director

enclosures

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International
PROJECT NAME: Mt. Anthony's H.S.
REPORT DATE: March 10, 1994
DATE SAMPLED: March 1, 1994
DATE RECEIVED: March 1, 1994
ANALYSIS DATE: March 8, 1994

PROJECT CODE: GIMA1937
REF.#: 56,871
STATION: MW 1
TIME SAMPLED: 10:40
SAMPLER: P. Hack

Parameter	Detection Limit (ug/L)	Concentration (ug/L)
Benzene	1	ND[1]
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	10	ND

Bromobenzene Surrogate Recovery: 102%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:
1 None detected

ENDYNE, INC.

Laboratory Services

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FAX 879-7103

LABORATORY REPORT

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International
PROJECT NAME: Mt. Anthony's H.S.
REPORT DATE: March 10, 1994
DATE SAMPLED: March 1, 1994
DATE RECEIVED: March 1, 1994
ANALYSIS DATE: March 8, 1994

PROJECT CODE: GIMA1937
REF.#: 56,872
STATION: MW 2
TIME SAMPLED: 11:00
SAMPLER: P. Hack

Parameter	Detection Limit (ug/L)	Concentration (ug/L)
Benzene	1	ND[1]
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	10	ND

Bromobenzene Surrogate Recovery: 99%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International
PROJECT NAME: Mt. Anthony's H.S.
REPORT DATE: March 10, 1994
DATE SAMPLED: March 1, 1994
DATE RECEIVED: March 1, 1994
ANALYSIS DATE: March 9, 1994

PROJECT CODE: GIMA1937
REF.#: 56,873
STATION: MW 3
TIME SAMPLED: 11:03
SAMPLER: P. Hack

Parameter	Detection Limit (ug/L)	Concentration (ug/L)
Benzene	1	ND[1]
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1	4.1
Toluene	1	1.3
Xylenes	1	8.1
MTBE	10	ND

Bromobenzene Surrogate Recovery: 108%

NUMBER OF UNIDENTIFIED PEAKS FOUND: >10

NOTES:
1 None detected

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International
PROJECT NAME: Mt. Anthony's H.S.
REPORT DATE: March 10, 1994
DATE SAMPLED: March 1, 1994
DATE RECEIVED: March 1, 1994
ANALYSIS DATE: March 9, 1994

PROJECT CODE: GIMA1937
REF.#: 56,874
STATION: MW 4
TIME SAMPLED: 11:35
SAMPLER: P. Hack

Parameter	Detection Limit (ug/L)	Concentration (ug/L)
Benzene	1	ND[1]
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	10	ND

Bromobenzene Surrogate Recovery: 97%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:

1 None detected

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International
PROJECT NAME: Mt. Anthony's H.S.
REPORT DATE: March 10, 1994
DATE SAMPLED: March 1, 1994
DATE RECEIVED: March 1, 1994
ANALYSIS DATE: March 7, 1994

PROJECT CODE: GIMA1937
REF.#: 56,875
STATION: Trip Blank
TIME SAMPLED: 10:20
SAMPLER: P. Hack

Parameter	Detection Limit (ug/L)	Concentration (ug/L)
Benzene	1	ND[1]
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	10	ND

Bromobenzene Surrogate Recovery: 99%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:
1 None detected

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International
PROJECT NAME: Mt. Anthony's H.S.
REPORT DATE: March 10, 1994
DATE SAMPLED: March 1, 1994
DATE RECEIVED: March 1, 1994
ANALYSIS DATE: March 8, 1994

PROJECT CODE: GIMA1937
REF.#: 56,876
STATION: Duplicate
TIME SAMPLED: 11:35
SAMPLER: P. Hack

Parameter	Detection Limit (ug/L)	Concentration (ug/L)
Benzene	1	ND[1]
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	10	ND

Bromobenzene Surrogate Recovery: 103%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:
1 None detected

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

EPA METHOD 602--PURGEABLE AROMATICS

CLIENT: Griffin International
PROJECT NAME: Mt. Anthony's H.S.
REPORT DATE: March 10, 1994
DATE SAMPLED: March 1, 1994
DATE RECEIVED: March 1, 1994
ANALYSIS DATE: March 9, 1994

PROJECT CODE: GIMA1937
REF.#: 56,877
STATION: Equipment Blank
TIME SAMPLED: 11:06
SAMPLER: P. Hack

Parameter	Detection Limit (ug/L)	Concentration (ug/L)
Benzene	1	ND[1]
Chlorobenzene	1	ND
1,2-Dichlorobenzene	1	ND
1,3-Dichlorobenzene	1	ND
1,4-Dichlorobenzene	1	ND
Ethylbenzene	1	ND
Toluene	1	ND
Xylenes	1	ND
MTBE	10	ND

Bromobenzene Surrogate Recovery: 100%

NUMBER OF UNIDENTIFIED PEAKS FOUND: 0

NOTES:
1 None detected

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

EPA METHOD 602 LABORATORY REPORT

MATRIX SPIKE AND DUPLICATE LABORATORY CONTROL DATA

CLIENT: Griffin International
PROJECT NAME: Mt. Anthony's H.S.
REPORT DATE: March 10, 1994
DATE SAMPLED: March 1, 1994
DATE RECEIVED: March 1, 1994
ANALYSIS DATE: March 8, 1994

PROJECT CODE: GIMA1937
REF.#: 56,872
STATION: MW 2
TIME SAMPLED: 11:00
SAMPLER: P. Hack

Parameter	Sample(ug/L)	Spike(ug/L)	Dup1(ug/L)	Dup2(ug/L)	Avg % Rec
Benzene	ND[1]	10	8.7	8.6	87%
Toluene	ND	10	8.8	8.7	88%
Ethylbenzene	ND	10	9.1	9.0	90%
Xylenes	ND	30	26.6	26.4	88%

NOTES:
1 None detected

ENDYNE, INC.

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

56,871 - 56,886

CHAIN-OF-CUSTODY RECORD

09372

Project Name: Mt Anthony J.H.S. Site Location: Bennington	Reporting Address: 28 Dorset Lane	Billing Address: same
Endyne Project Number: G1MA11.1	Company: Griffin Contact Name/Phone #: P. Hack 879-7708	Sampler Name: same Phone #:

Lab #	Sample Location	Matrix	GRAB	COMP	Date/Time 3/1/94	Sample Containers No.	Sample Containers Type/Size	Field Results/Remarks	Analysis Required	Sample Preservation	Rush
56871	MW1	H_2O			10:40	2	40 ml		20	HCl	
56872	MW2				11:00				+ TPH		
56873	MW3				11:03						
56874	MW4				11:35						
56875	Trip Blank				10:20				8100 + TPH		
56876	Duplicate Blank				11:35						
56877	Equipment Blank				11:06						
~~56878~~	MW1	H_2O			10:40	2	1L	~~TOL~~	8100 + TPH	HCl	

Relinguished by: Signature P Hack	Received by: Signature Melissa Lawrence	Date/Time 3/1/94 3:20 pm
Relinguished by: Signature	Received by: Signature	Date/Time

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	27	EPA 8010/8020
3	Ammonia N	8	Total Diss. P	13	TDS	18	COD	23	EPA 418.1	28	EPA 8080 Pest/PCB
4	Nitrite N	9	BOD_5	14	Turbidity	19	BTEX	24	EPA 608 Pest/PCB		
5	Nitrate N	10	Alkalinity	15	Conductivity	20	EPA 601/602	25	EPA 8240		
29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify):										

ENDYNE, INC.

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333

CHAIN-OF-CUSTODY RECORD

09372

Project Name: Mt Anthony JHS Site Location: Bennington	Reporting Address: 2 B Dorset Lane	Billing Address: same
Endyne Project Number: 12934471	Company: Griffin Contact Name/Phone #: D. Hack 879-7708	Sampler Name: same Phone #:

Lab #	Sample Location	Matrix	GRAB	COMP	Date/Time 3/1/94	Sample Containers No.	Sample Containers Type/Size	Field Results/Remarks	Analysis Required	Sample Preservation	Rush
	MW1	H_2O			10:40	2	40 ml		20	HCl	
	MW2				11:00				+ TPH		
	MW3				11:03						
	MW4				11:35						
	Trip Blank				10:20				8100 + TPH		
	Duplicate Blank				11:35						
	Equipment Blank				11:06						
	MW1	H_2O			10:40	2	1 l	~~60~~	8100 + TPH	HCl	

Relinquished by: Signature D Hack	Received by: Signature Nicole Cureau	Date/Time 3/1/94 3:20 pm
Relinquished by: Signature	Received by: Signature	Date/Time

Requested Analyses

1	pH	6	TKN	11	Total Solids	16	Metals (Specify)	21	EPA 624	26	EPA 8270 B/N or Acid
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	EPA 625 B/N or A	27	EPA 8010/8020
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29	TCLP (Specify: volatiles, semi-volatiles, metals, pesticides, herbicides)										
30	Other (Specify):										

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

RECEIVED MAR 17 1994

REPORT OF LABORATORY ANALYSIS

CLIENT: Griffin International
PROJECT NAME: Mt. Anthony J.H.S.
DATE REPORTED: March 15, 1994
DATE SAMPLED: March 1, 1994

PROJECT CODE: GIMA1938
REF. #: 56,878 - 56,884

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody record.

Chain of custody did not indicate sample preservation.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which included matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits.

Reviewed by,

Harry B. Locker, Ph.D.
Laboratory Director

enclosures

ENDYNE, INC.

Laboratory Services

32 James Brown Drive
Williston, Vermont 05495
(802) 879-4333
FAX 879-7103

LABORATORY REPORT

TOTAL PETROLEUM HYDROCARBONS (TPH) BY MODIFIED EPA METHOD 8100

DATE: March 15, 1994
CLIENT: Griffin International
PROJECT: Mt. Anthony J.H.S.
PROJECT CODE: GIMA1938
COLLECTED BY: P. Hack
DATE SAMPLED: March 1, 1994
DATE RECEIVED: March 1, 1994

Reference #	Sample ID	Concentration (mg/L)[1]
56,878	MW-2; 11:00	ND[2]
56,879	MW-3; 11:03	ND
56,880	MW-4; 11:35	ND
56,881	Trip Blank; 10:20	ND
56,882	Duplicate; 11:35	ND
56,883	Equip. Blank; 11:06	ND
56,884	MW-1; 10:40	ND

Notes:

1 Method detection limit is 0.1 mg/L.
2 None detected.